Texas E-cycling STandards (TEST)

As computers and other electronic equipment have become an increasingly important part of our personal and professional lives, they have also become a rapidly growing part of our waste. The Texas E-cycling STandards were researched, compiled, and developed by the Electronic Resource Recovery Council of the Recycling Alliance of Texas to help minimize this waste and the negative economic, environmental, and public health impacts that it can create.

Disposition service providers, or E-cyclers, that subscribe to these standards, or "pass the TEST," are committed to the responsible management of surplus and end-of-life electronic equipment. As assurance of this commitment, they have agreed to provide their customers with a copy of the Texas E-cycling STandards, including a signed statement by an officer of the organization agreeing to abide by them as a condition of the use and display of the TEST logo and recognition by the Electronic Resource Recovery Council of the Recycling Alliance of Texas.

Large-scale generators of surplus electronic equipment (including municipalities and other organizations that sponsor public "e-waste" collection events) can incorporate the TEST as a whole or in any part in their contracts for disposition services or in their qualifications for bidders, with specific documentation required for any or all items.

The TEST logo and certificate are the property of the Electronic Resource Recovery Council of the Recycling Alliance of Texas, which reserves the right to deny their use or display to anyone who fails to document or otherwise demonstrate compliance with any of the TEST elements.

Texas E-cycling STandards (TEST) Best Management Practices for Electronic Equipment Disposition Service Providers

A. General Operations

- 1. Comply with all applicable state and federal environmental and safety laws and regulations, including notification, permit and registration requirements.
- 2. Maintain an effective, compliant safety program, documented by training records, OSHA 300 Log, etc.
- 3. Maintain an effective security program to prevent theft of electronics and data.
- 4. Document environmental, safety, and security audits of facilities.
- 5. Maintain general liability insurance coverage (\$1,000,000 minimum); make certificate copies available to upstream sources (generators/suppliers).
- 6. Facilities requiring EPA identification numbers as small or large-quantity generators of hazardous waste: maintain environmental liability insurance coverage (\$1,000,000 minimum); make certificate copies available to upstream sources (generators/suppliers).
- 7. Maintain and document an effective environmental management system.

B. Inventory Control

- 1. As requested by the customer, conduct a detailed, complete inventory of all equipment, components, and materials at the point they are received.
- 2. As requested by the customer, make asset numbers, asset tags, or serial numbers identifying each piece of equipment or component available to generators/suppliers as evidence of disposition.
- 3. Document the transfer of ownership of all electronic equipment, components, and materials received.
- 4. Provide documentation of tax-deductible donations of equipment (non-profit organizations).

C. Data Security Measures

- 1. Use tested and reliable software for data erasure.
- 2. Employ a quality assurance process to check effectiveness of data erasure on units to be reused/resold.
- 3. As requested by the customer, provide documentation of data erasure on all hard drives to be resold.
- 4. Ensure complete destruction of EoL (End-of-Life) hard drives to prevent retrieval of information. Make documentation available upon request to customers.

- D. Maximize Value, Minimize Risk: the Seven R's
 - 1. Evaluate electronic systems and components to determine their functional value, implementing the following hierarchy of management options, in order of preference:
 - a. Reuse
 - b. Repair / Refurbishment / Remanufacturing
 - c. Recovery of functional components
 - d. Recycling of constituent materials
 - e. Responsible disposal of hazardous and non-hazardous wastes
 - 2. Document the removal of hazardous components such as fluorescent tubes, mercury-containing switches and relays, and nickel-cadmium and lithium batteries before shredding equipment for recycling.
 - 3. Upon request, or as a provision of service contracts or other business agreements, provide customers with client-specific accounting of all equipment received and its disposition. This accounting may be in the form of an itemized report, and/or as a mass balance report including the following information:
 - a. Equipment Received (Inputs) accounting to be submitted with billing statements or within 30 days of receipt:
 - Weight of whole units (categorized by type) for ultimate reuse (donation, resale, repair, refurbishment);
 - ii. Weight of parts/components (categorized by type) for ultimate reuse (resale, repair, refurbishment);
 - iii. Weight of whole units for end-of-life processing (parts recovery, recycling, disposal); and
 - iv. Weight of parts/components for end-of-life processing (recycling, disposal), categorized by type.
 - b. Equipment/Material Disposition (Outputs) accounting to be submitted within 60 days or other agreed-upon schedule, with receipts from downstream buyers and service providers available for customer audit:
 - i. Weight of whole units sent to brokers/buyers for ultimate reuse
 - ii. Weight of parts/components sent to brokers/buyers for (ultimate) reuse
 - iii. Weight of end-of-life whole units sent to processors for parts recovery, recycling, disposal.
 - iv. Weight of end-of-life parts/components/materials sent to processors (leaded glass, other glass, plastic, metals, whole circuit boards, shredded circuit boards, adapters, power cords, batteries, transformers, capacitors, mercury switches, mixed materials, other), categorized by type.
 - v. Weight of non-recyclable parts/components/materials disposed of, categorized by type and means of disposal (incineration, landfilling as hazardous or non-hazardous waste).
 - 4. Audit downstream vendors in the chain of custody, both domestic and international, requiring documentation of regulatory compliance and

responsible recycling and disposal of hazardous and non-hazardous materials.

E. Responsible Export Practices

- 1. Comply with all applicable laws and regulations, including country-specific import/export regulations.
- 2. Maintain documentation for exports from the United States of electronic systems and components, including:
 - a. shipping manifests identifying the recipient and showing make, model, and condition for all declared reuse items, and
 - b. any other information necessary to complete the export
- 3. Do not export from the United States any non-working cathode-ray tubes (CRTs) or other hazardous equipment, components, or materials for recycling to any countries other than:
 - a. members of the Organization for Economic Cooperation and Development (OECD);
 - b. members of the European Community; or
 - c. countries that have entered into an agreement with the United States that allows for such exports.
- 4. Retain all export-related documentation for a period of one year or as required in applicable export documentation retention schedules, whichever is longer.